

**ABSTRACT**

In the present invention a voice and data network is disclosed that has applicability to a home or building where existing phone lines are used to interconnect multiple phones and computers within the network. Voice and data modules connect telephones and computers to the existing telephone wiring in a home or building. A link to wide area network allows phone calls to be placed between the network and the Public Service telephone network. All devices connected to the telephone wiring have their own ID and communicate by Tokens in Ethernet technology. This allows Ethernet packets to perform a plurality of communications between a plurality of devices connected to the network under the control of tokens. The communications is accomplished by passing packets containing voice and data signals between phones and computers internal to the network and to an external port to connect to outside of the network. The link to wide area network also allows connection to an ISP by converting from Ethernet packets to Internet packets and from Internet packets to Ethernet packets. The connection to the ISP also allows Internet Telephony without a special telephone or the use of a computer.